REMARKS/ARGUMENTS

The original patent application has been modified consistent with the requirements of 37 CFR 1.121. Rebuttal comments are detailed below in response to the unacceptable portions of the original submission.

It is respectfully conceded that the conflicting points cited are generally valid. However, we believe that the root cause of these conflicts is the result of an improper presentation of our material. Accordingly, we are herewith submitting a revised description of the prior art that highlights the unique features of our device relative to the existing patent data. It is our hope that this preliminary descriptive data will establish the uniqueness of our system and thereby justify a resubmission of our patent application.

We are not establishing a claim(s) for the use of immersion optics or the fluid dispensing techniques as described in the referenced patents. We are proposing a unique applicator that can apply (and/or remove) the immersion fluid without necessitating any changes to a microscope's optical assemblies.

It is worthy of note that it is inherently necessary that the distance between the objective lens and the specimen slide be minimal (approx. 0.2mm). This is mandated by the dual requisite of close-up optical analysis and the need to completely fill the lens-to-specimen volumetric interface with immersion fluid. It is not physically possible to utilize any of the dispensing (or marking) systems referenced to accomplish this task.

All of the cited patents describing fluid dispensing systems require mechanical modification to a microscope's optical components to accept the dispensing assembly. None of the systems has an extraction device to remove the immersion fluid or can achieve their design goals when using an inverted microscope. (In the case of the immersion lithography that is referenced, carbon dioxide is manually employed to dry the semiconductor substrate and no dispensing system is proposed.)

It is our contention that the concept we are presenting will result in an applicator that is remotely located and does not require any attachments or modification to the optical members of any microscope system. It is a "demand" system that is mechanically stowed away from the optical viewing path, but, when needed, positions itself into the field of view to dispense the desired fluid either on the specimen slide or, in the case of an inverted microscope, on the objective lens.

This remotely positioned characteristic results in four salient features:

(1) The system is compatible with the rotational motion of present-day objective lens turret assemblies.
(2) More than one objective lens of the turret can be utilized in an immersion optics mode.
(3) It facilitates the use of immersion optics for inverted microscopes
(4) The system is stage-mounted; it can be applied to any microscope without mechanically altering, or adding to, the components in its optical path

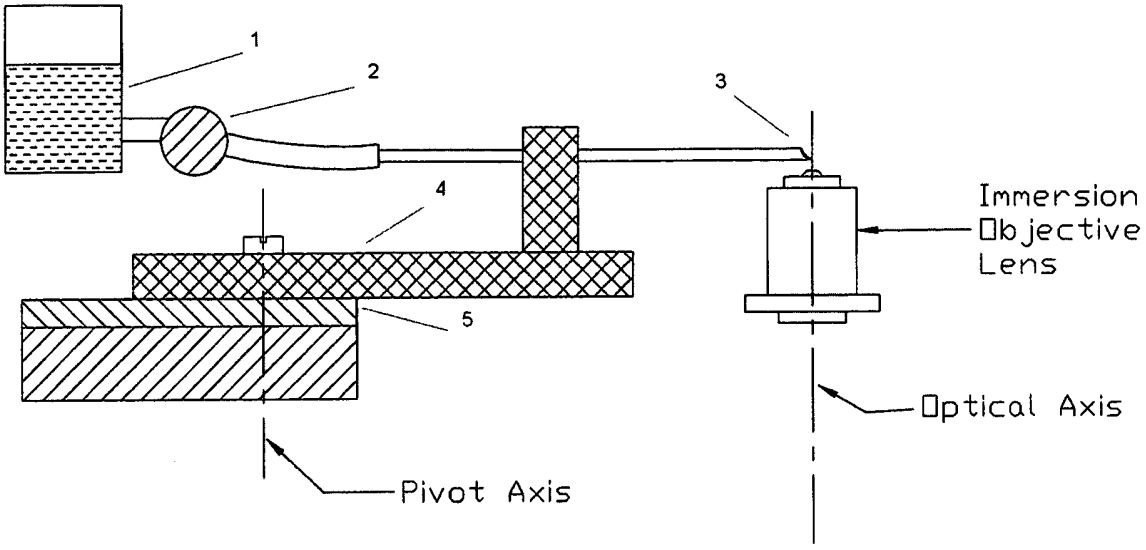
The merits of using fluids to increase the numerical aperture of general microscope analyses are well established. Our objective is to provide an independent delivery device that can apply and/or remove the immersion fluid without any modification of the basic optics. It is a stand-alone device that is adaptable to any general microscope, both vertical and inverted.

REVISED DRAWING

It has been correctly stated (Claim Rejection – 35 U.S.C 112) that claims 3-4 were rejected for failure to comply with the written description requirement. This error has been rectified by a slight embellishment of the Figure 1 drawing and associated text revisions.

The drawing has been revised and forms a part of this correspondence to show the presence of a coaxial vacuum extraction channel in the dispensing arm.

This is the original drawing:



DISPENSING POSITION (Side View)

Figure 1